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ATTCAATCTTCAAAGTCTTTTCAAACGCTCCATACAGTTGCCCAAATGGCGGCGCAGG
ATTTTGACCACGCGGTTGCGCCTGCCGCCAGCAGCAGGTCGAGGATTTGCGGTTGTTTCG
GAATGCGTATGCGTATTGATGGCGTGTTCCTCGCGATGCACGCCCGCCACGGCGACA
50 ATCAGGGAAGACCGCGCGCACAGCGTATTCATAATGTGCAACAGCAGCATCGTTGCCACC
AGGCGCGCCAGTTCGACGTGGAAGGCATTGGACAGGCGGTTCCAGCCGACGCGGTGCCCC
CTGCCGAGGCTCTTCTTCGCGCGGTATCATCGCATAAAGCGGCTTGAGGCGCGTTTCC
AAATCCGGCAAATCTGCGAGGATATTCAAAATCATCGTCTCCATTTTCGATGCGCGCATG
AACACATCTTCGATTTCTTTCAAATCGGGAACGTGGACGAACGCGCCCTGTTGGGTTGC
55 AAATCGACAATCTTGTGCTGCGCCAAAGCGACAGCGCGCCGCGGACGGTGTGCGCGAA
CACACCATCTGACGGCAAAGTTTCGGATTTCGGTCAGCTTTTTGCGGGCAGCAGCACCTGA
TCGGTAATGCCGTCCAAATCAGGGCGTAACACGGAACAGCTCCGAATCGTCCGCTCT

TCGAGAATCAGGGAAGACGTGGTCGGCGCATGGATAATGTCGTCGTTTTCAAAGTTCATG
ATGTTTTCCGTATTTTTACGCTTTCAAATTTTTTAAGATGTTTAAAGCGGCTGTGTTTC
AAATCGTGTGAGAGGAATTAAGCATTGCACAAATTTATTTTATAGTGGATTAACAAAA
TCAGGACAAGGCGACGAAGCCGAGACAGTACAAATAGTACGGAACCGATTCACTTGGTG
5 CTTACGACCTTAGAGAATCGTCTCTTTGAGCCAAGGCGAGGCAACGCCGTACTGGTTT
TTGTTAATCCACTATAATTCAATAAATTAATATATGGCTTAAATAACGGGATTCTCGCC
TCCCCCGCCCGCAGAAAGCAGGCGGATATCATTTTAAACGCGGCATTTAAATTTGAC
CGAAATTTGTTGACAATCCGGAATCAAGTCTGCACAATACCCGACAAGTCCAAGTATTA
TAAAGGCTGAATAAAGAGGAAACAGCAGGCAGATATATTCGGGAGGTGCAGTCCGAATAT
10 ATCTGCTTTTTTATGCGCTCCGATTGCCTGCCGACCTTTCCCTTCAGACGGTATCAG
CCGTTTCCCATATAATGCCGCCGATGCCTATTTATCTGCCCGGCAATTTCAAACCTGTG
GGTAATCTTTGCCGCTTTGCCCAACATAATCGAAGCCGAACAGTATTTTTTCGGCAGACAT
CTGAACGGCGCGCTCAATGGCCGATTCTTTCAAATCATGCCGAATACTTTGAAATGGAT
GTGGATTTTCGGTAAACACGCGCGGCGCATCGTCCGCCGTTTCGCCGTAACCGTCGCACG
15 GCAGTCAGTCACTTTCTGACGCTGTTTTTCGGCAATCATCACCACATCGATGCTCGAACA
GCCCCCGACGCCAACAGCAGCATTTCCAAAGGGCTGGGCCCGCGCTTAGCCTTACCTTC
TGCCGCGGACCCCTCCATAACGACGCTGTGCCCGCTTCCGTCGTGCCGACAAAACACAT
CCCGTCTATCCATTTTGATGTAACCTGCATGGTGTCACTTCTGAAAATAGCGTTAAACCC
GCTTTGCATATGGCGTTATTGTAACAATTTCAAGCGGCTTATGCAGAAATATGGACAAA
20 ACGGCAAAAAACACTTGAAAACCGATTTTACGTTTGGCTGCCGTGGCCGTTGATCTGCAC
CGATTTGAGTTTCAGCGTATAGGTTTGGCCGTCGTGCGTATAGCCGATTGTGCCGGAAT
ATTGTTTCAGGGACGGTGCAGAAATACATTACCGCATCGTCGCCGCGCCGACCCGATA
TTTGACGACTTCGTTTCCACGCGCGCTATGCTGTATTTTCCGTGACCCGCTTATTCAA
ACCGCCGACGGAATAAGTTTTTTGCCGTTGGTGATTTTCAGCCCCGGGGGAGTTTCGC
25 GTCATTTGCCGCCAACTGCCAGGCAAGCGTGAACAAATCCATAGCCTTGGGGCTTTGCTC
GGTTTTGCTCTCGCCCGCTTTGCCGTAAGTTACGCTGCCGTCCGCGAATTTGGCTTCCGC
ATACAGTTTCCCCTGCGTATGTCTCTATAGTAGGTAGGTGCAGGGTATTGCCGACAAC
CGTACCGCCGCGACTCGAAACGGATATTGTATAGCGGCACCTTAAATCGTCGAAACGATTTT
GTAAGCATTGCCGCTGCGTTCAAATGTCATCGTGGCGGGAATGCCGTAGCTGCCGGAATA
30 GTGCAGCACGGCGGATTGGGGCAGCCCTGCCGCATACGCGCACGGCAGGGCGGCGGACAA
AATGGCGGCGGAAAATATATTTTTAAAGTCTTCATCATTTGCTCCCCCGCGTTTACGC
CGTCAGAAAACGGGCGGCATCGGCGTTTCCGAATTTCTGACGCGGTTTCCCTCAATAAT
CAGGCGGCGCGCGGCAAAATCGGCAACGGCTTTCCGATAAAGTTTATGCTCGACAGCCAA
AACCCGTGCCGCAATATCGTCTGCCGTATCGCCGTGAGTATCGGCACAACCCCTTGCGA
35 TACAATCGGGCCGCAATCCAGTTCGGCAGTAACGAAATGGATGGTGCAGCCGGCAACGCG
GCAGCCCCGCTCCAAAGCGGTTTCGTGCGTATGAAGTCCGGTAAACGAGGGAAGGATGGA
CGGGTGAATGTTTCATCAGCCTGCCTTCGTAACGGGCGCAAACTCGGGGGTCAGAATCCG
CATAAAACCTGCCAAAACCAAGTCGGGTTGATATGCGTCGATTTTCTCCATCATGGC
GGTATCGAAGGCAAGCCGGGATGTAAAGTTTTTATGATTCAGGCTATCGGTCCGGATGCC
40 GCGTTCCGCCGCCCATTTGCAAACCGGCAGCCGTTTCGCTGTTGCTCAACACGGCGGCAAT
GCGGACGTTGTGAATGGCGGCATTGACGATTGCCTGCATATTGCTGCCGCGTCCAGAAAT
CAGGATGACGATGTTTTTCATAATGGTGCCTTTTGAAAGGGATGCCGTCTGAACCGCTG
TTTGGTGGTTTCAGACGGCATTTGCCGTAAAAATGCCGAAAACCTGTTTCGGGCATGGA
TTCGGACTTAATTTACTTTTTTGATGTGCACTTGAGCCGGCTGCTTGGCGGGCGCGTTTT
45 CGGGTGCGCCGATTTTGACAGTTTCACATCAAATACCAAAGTGGCGTTTCGGACCGATT
TGTCGCCCGCACCCCTGTTCCGGTAGGCAAGGTTGGACGGGATGTAGAACGTGGCTTCGC
CGCCTTCTTTCAGAAGCTGTACGCCTTCGGTCCAACCCGGAATCACTTGGCTCAAAGGGA
AGGTGACCGGGCGCCGTTGGCTTTGCTGCTGTCGAATACCGTACCGTCAATCAGGCGGC
CTTCGTATTCCACGGTAACGATGTCGTCTTTGGTCCGGTGTTCGCTTCGCCCTGTTTGG
50 TGATTTTGTATTGCAGGCCGGAAGCAGTGGTCTTCACGCCGTCTTTGGCGGCATTTCTT
TCAGAAAGGCTTCGCCTTTTTCTTTATTGGCCTTCGCGTCCGCCTTGTGTTTTCTACGG
CTTTAGCCTGTTGTTCCCTGAAGGAATTTTCATCATGACTTCTTGAGCCTGCTCTTCGGTCA
TTTTGATTTCTTTGCCGTACACTGCGTGCATGGCTTCGGTAAAGACTTTCAAATCGA
TTTCCGCGCCCTGTTCTTTCATTTGCTTCAGGGAGCGTCCGATGTCCACGCCCATCGCAT
55 AGCTTGCTGCTGCATCGTGTGCCGATCGAAGAGGTGTGCCCTGCCGGAAGAACGG
CGGCAGGTTCCGATGCAGATGCGGGGGCGGCTTCTTTTTTCCGCGAGGCGGAAAGTGCCA
AAGTCGGCGGG

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The following partial DNA sequence was identified in *N. meningitidis* <SEQ ID 23>:

gnm_23

CGTTTTTCATACCAAATGCTGCGTCAGGTTGTGGAACCTCGGCGCGACTGATGCTTGTGTC
5 GATTGCCATGCCGTCTGAAAGCGTCGCCTGAATGCGCGCTTCGGTTTTCGGTGGTTAATTG
TTCTTTGGCGGCGCGGACGAGCGAGAGCAGGAGTTGGCTGTCTTGTTCGTTGAGTTGGGA
GAGTCCGTTTTTGTTCGAGCAGGCGGCAGAACAGGCGGTGGTCGAAATCGTCGCCGCCCAA
CGCGCTGTTGCCGCCGGTGGCTTTGACTTCAAACAGTCCTTTGGTCAGTTGCAATACGGA
10 TACGTGCAATGTGCCGCCCTAAGTCGTACACGACAAACGTGCCTTCCGAGGCGTTGTC
CAGCCCCGTATGCGATTGCGGCGGCGGTGGGTTCTGTTGAGCAGGCGCAATACGTTCAAACC
CGCCAGACGCGCGGCATCTTTGGTGGCCTGGCGTTGGGCATCGTCGAAATAGGCGGGGAC
GGTAATCACCACGCCGACCAAATCGCCGCCCAAGGTTTCTTCGGCGCGCGATTTAAGGGT
TTTGAGGAkTCCGCCGACACTTCGACAGGCGTTTTCACCCCTGCCGCGTATGCAGTTC
15 GATAACGCGTTGATTGTGCGCGAAACGGTAAGGCAGGTAGTGCGTATTTnAGGCGGCGC
ACGGCGTTGCGTTCTTCCATCAGACGCGAATCGGCAACGCGGTTnTCGGGTGGGCGCAA
AACGGGCATTTTCATCGGGTTCGTCTCTATGTCTGAAGTTTCAGACGGCGACGCCGC
GGGCGGGCnATTTCCAGACCTTCTTCGGCACTCATATAGACGGGGTTTTCGGGACGGTCG
TGTCGGACGATGTTGCCTTCGCGGAACATGACCAGTTTGTnCACGGCAAGTTGGGACCAT
GATTnCnTCGCGGGTCA
20

The following partial DNA sequence was identified in *N. meningitidis* <SEQ ID 24>:

gnm_24

CGGCGAAAATAGCGGTCAATGAGGCGAAGCCTGCCGATGCCAATGCCCAAAACAGCCATG
CGTTGCTGCCCATGTTTTCTCCTTGGATTGTGAACAATATGAACGGTATTTTTGTTGCTG
25 CGTCAAAAATTTCACTGCGGGTTTGGTGGCGGATAACGTTATAATATGCCTGATATTATT
TCAATCCACCTGTTTGTGCGCTGATGCTTTTCAGACGGCATGTCCCTCCTCATTTCTAAAG
GAAAATCATGAGCTTCAAACCGATGCCGAAATCGCCCAATCCTCCACCATGCGCCCGAT
TGGCGAAATGCGGCCAAGCTTGGTCTGAATGCCGACAACATTGAGCCTTACGGTCATTA
CAAGGCGAAAATCAATCCTGCCGAAGCGTTCAAACCTGCCGCAAAAACAGGGCAGGCTGAT
30 TTTGGTTACCGCCATCAACCCGACTCCGGCGGGCGAAGGCAAAACACCGTAACCATCGG
TTTGGCGGACGCGTTGCGCCACATCGGCAAAAGATGCCGTGATTGCCCTGCGCGAACCTTC
TCTGGGGCCGGTGTTCGGCGTGAAAGGCGGCGCGCAGGCGGCGGCTATGCCAAGTTTT
GCCGATGGAAGACATCAACCTGCACCTTACCAGGAGATTTTACGCCATCGGTGCGGCAAA
TAATCTGCTTGGCGCGATGCTCGACAACCATATCTACCAAGGCAACGAGTTGAACATCGA
35 CCCCAAACGCGTGCTGTGGCGGCGCGTGGTCGATATGAACGACCGCCAGTTGCGCAACAT
CATCGACGGCATGGGTAAACCCGTTGACGGCGTGATGCGTCCTGACGGTTTCGATATTAC
CGTTGCTTCCGAAGTGATGGCGGTATTCTGTCTTGCCAAAGACATCAGCGATTGAAAGA
GCGTTTGGGCAACATCCTTGTGCGCTACGCCAAAGACGCGCAGCCCCGTTTACGCCAAAGA
TTTGAAAGCGAATGGCGCGATGGCGGCATTGCTTAAAGATGCGATTAAAGCCCAACTTGGT
40 GCAAACCATCGAAGGCACGCCCGCCTTCGTACACGGCGGCGCCGTTTCGCCAACATCGCCCA
CGGCTGCAACTCCGTAACCGCAACCCGCTCTGGCGAAACACCTTGCCGATTACGCCGTAAC
CGAAGCAGGCTTTCGGCGCGGACTTGGGCGCGGAAAAATTCTGCGACATCAAATGCCGCCT
TGCCGGTTTGAACCTGATGCGGCTGTTGTCTGCGGACTGTCCGCGCGTTGAAATATAA
CGGCGGCGTGGAACGCGCCAACCTCGGCGAAGAAAATTTAGACGCTTTGGAAAAAGGTTT
45 GCCCAACCTGCTGAAACACATTCCAACCTGAAAAACGTATTTCGGACTGCCCGTCGTCGT
TGCGCTCAACCGCTTTCGTGTCCGACGCCGATGCCGAGTTGGCGATGATTGAAAAAGCCTG
TGCCGAACACGGCGTTGAAGTTTCCCTGACCGAAGTGTGGGGCAAAGGTGGTTCGGGCGG
CGCGGATTTGGCGCGCAAAGTCGTCAACGCCATTGAAAGTCAAACCAATAAATTTCGGTTT
50 CGCCTACGATGTGAGTTGGGCATCAAAGACAAAATCCGTGCGATTGCCCAAAAAGTGTA
CGGCGCGGAAGATGTTGATTTCAGCGCGGAAGCGTCTGCCGAAATCGCTTCACTGGA

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ACTGGGCTTGGACAAAATGCCGCTCTGTCATGGCGAAAACCCAATACTCTTTGAGCGACAA
CGCCAAACTGTTGGGCTGCCCCGAAGACTTCCGCATCGCCGTGCGCGGCATCACCGTTTC
CGCAGGCGCAGGTTTCATCGTCGCCCTGTGCGGCAACATGATGAAAATGCCCGCCTGCC
5 CAAAGTTCGGGCTGCCGAGAAAATCGATGTGGACGAGAAGGCGTGATTACGGCTTGT
CTGAACGGTTTCTGAAACCGGATGCCGTCTGAAGCCGTTTCAGACGGCATTTCCTCGGA
ACGCGGGCGCGGTATGCTATAATCCGCCGTTAAATTTCTCTATTTTCAGGAAAAACAT
GAGTTTGAAATGCGGCATCGTCGGTTTGCCCAACGTGCGCAAATCCACCTTTTTTAACGC
GCTGACCCAATCGGGTATCGAAGCGGCAACTATCCTTTCTGTACCATCGAACCCAACGT
10 CGGCATCGTCGAAGTCCCCGATCCGCGTATGGCCGAATTGGCAAAAATCGTCAATCCGCA
AAAAATGCAGCCTGCCATCGTCGAATTTGTGATATTGCCGTTTGGTTGCAGGCGCGAG
CAAAGCGGAGGGCTTGGGCAACCGATTCTTGCCAACATCCGCGAAAACCGATGCGATTGT
GAATGTCGTGCGCTGCTTTGACGACGACAACATCGTCCACGTGTCAGGCCGCGTCGATCC
GATTGCCGACATTGAAACCATCGGCACAGAGTTGGCACTTGCCGACCTGGCAAGTGTCGA
AAAAGCCATCGTCCGCGAAGAAAACGCGCCCGCTCAGGCGACAAAGACGCGCAAAAGCT
15 GGTGATTTGTGCAAAAACCTGCTGCCGCATCTGGACGAAGGCAAACCCGTGCGTTCCTT
CGGTTTGGACGCGGAAGAACGCGCGATGCTCAAACCGCTGTTCTGCTGACCGCCAAACC
GGCGATGTATGTGGCAACGTCCCGGAAGACGGTTTGTAAAACAATCCGCACCTCGACCG
CCTGAAAGAATTGGCGGCAAAAGAAAACGCCCCGTGCTGCGCGTTTGGCCCGGATGGA
GAGCGAAATTGCCGAATTGGAAGACGAGAAAAGCCGAGTTCTCGCCGAAATGGGCTT
20 GGAAGAACCGGGCTGAACCGCTGATTCTGTCGGGTTACGACCTCTTGGGGCTGCAAAAC
CTATTTACCGCCGGTGTGAAAGAAGTCCGCGCGTGGACGATACACAAAGGCGACACCGC
GCCGCAAGCCGCGCGGTGATTACATACGATTTTGAACGCGGCTTCATCCGCGCCCAAGT
CATTTCTTACGACGACTTTGTCTGCTCGGCGGCGAAGCCAAAGCCAAAGAAGCCGCA
AATGCGTGTGGAAGGCAAGGAATATGTCGTGCAAGACGCGCATGTGATGCACTTTTTGTT
25 TAACGTGTAACCCAAATGCGGCAGGTTTCAGGCGGCTTGCCGGAATGCCGTCTGAAGCC
GATTTTGTGATTTTTCGGCGTTTCCCGTACCGCCGAATGCAGCCGCATCAAAATAAACT
CCCACCCGATTTCCGATTGCCCCCTCCCGATTCTGCAAAACAAACCGCTGCCCGCC
GTTACGGGAAGCCGTCCGCGCATTCGAATATCCCGATCCCCGATACGAAATGACCTTTCA
GACGGCATTTCGCCCGCCGCTTTCGAGTATAGTGGATTAACCTTTAAATCAGGACAAGGC
30 GACGAAACCGCAGACAGTATAGATAGTACGGCAAGGCGAGGCAACGCCGTACTGGTTTTT
GTTAATCCACTATAAAAACATTATGAGCCAAGCCTTACCCTACCGCCCGGACATCGACAC
ATTGCGCGCCGCGCGCTTGTGTCGTATCGTGTCCATATCGAAAAGGATTGGCTGCC
GGGCGGGTTTCTCGGTGTCGATATATTCTTTGTGATTTTCAGGCTTTTTGATGACGACGAT
TCTTACCGCGAAATGTGCGGGGGGGGGGGAGGTTTCCCTGAAGGCATTTTATATCCG
35 CCGCATCAAGCGGATTCTGCCCCGATTTTTCGCGTATTGGCGGCAACGCTGGCAGGCGG
CTTCTTTTTATTACCAAAGATGATTTCTTTCTTTTGTGAAATCCGCGCTGACCGCCTT
GGGTTTTCGCTCTAACCTGTATTTTGCAAGGGGGAAGGATTATTTGATCCCCGCGCAGGA
AGAAAAGCCCCGTGCTGCACATCTGCTCTTTGTGCGTGAAGAACAATTTTACTTTGTCTT
TCCGATACTGCTGCTGCTTGTGCCCCGCAAAAGCCTGCGCGTACAGTTGCGCTTCCTTGC
40 CGCACTGTGTGCCTTAAGCCTTGCCGCTCCTTTATACCTTCCGCGCTCGATAAATATTA
CCTGCCCCACCTGCGCGCTGCGAATTACTGATAGGATCGCTGACCGCCGTGTGGATGCG
CTGCCGGAACCTGCCGTGCGCAGACGCTGTGCCGCGCTCGGCGCATTTGTTGCCGTGTG
CATATTGTCAACCTGCCTGTTTCTTATTCGGAACAAACCGCCTATTTCCCGGGCCCCGC
CGCTTTGATTCCCTGTCTGGCTGTTGCCGCGCTGATTTATTTCAATCATTACGAACACCC
45 GCTTAAAAAATTTTTCCAATCGAAAATCACTGTTGCCGCGGTTTGATTTCTATTCTGCT
TTATCTGTGGCATTTGGCCGATATTGGCCTTTATGCGCTATATCGGCCCGGACAACCTGCC
GCCTTATTCGCCGGCGCGCGCTGCTCCTGATATTGCTGCTTTCCCTGTTTTCTTACCA
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50 TATGGCGCAATACGACCGCTTGGGGCTGACGCGTTCCAACACCTCCTGCCACAACAATAC
CGGCAAAACATGCCTATGGGGGATACGGAAAAACAGCCGGAACCTGCTGGTTTTGGGCGA
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CGCCACTATGGTTTTCCGCGGACGCTTGCGCCTATGTGGAAGGCTACGCGTCCCGTGTGTT
CCAAAACGCGGCGCTGCGCGCGCTTTATCGCTATGCCGAAGAACCTGCCCGGTA
55 TTCAAAAGTGGTTTTTGGCGATGCGCTGGGGCAGCCAAATGCCCCGAAAACAGCCGCTCCCT
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AAAACAGCCGTTTACCTGATGGCGGACAACCTTGCCTCGTCTTACAACGTCCAGCGCGC

CTATATCTTGTCTTACGCATACCGGGTTACCGCCAAGCCCTGCGCCCGGACGACGAAAG
CACCCTGAAAGCCAATGCACGCATCAGGGAATTGGCAGCCAATACCCCAACGTCTATAT
TATTGATGCCGCCGCTATATCCCCGAGATTTTCAAATCGGCGGATTGCCGGTTTACTC
GGACAAAGACCACATCAACCCTTACGGCGGCACGGAATTGGCAAAGCGTTTTTCCGAAAA
5 ACAACGGTTTCTCGATACGCGCCATAACCATTGATTGCTTAAATTTGTTACAATCGGCG
GTTTGCAAACGCTAATTTTTTTTTGAAAGAGACCGATGAGCGTCATCCAAGACCTGCAA
TCGCGCGGCCCTTATCGCGCAAACCACCGACATCGAAGCCTTAGACGCTTTGTTGAACGAA
CAAAAAATTGCCCTTTATTGCGGCTTCGACCCGACCGCGACAGCCTGCACATCGGACAC
10 CTGCTGCCCCGATTGGCATTGCGCCGCTTCCAACAGGCGGGGCATACGCCGATTGCTTTG
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AATTCGCCGGAAGTGTGCGGCTGGGTGGAAGTATCCGCAACCAATTAACCCCTTTC
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15 TTCGCTATTCCCTGCTGCAAGGTTACGACTTCGCCGAGTTGAACAAACGCCACGGCGCG
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20 AAATACTTTACCTTCTGTCCATCGAAGAAATCGATGCCATCGAAGCCAAAGACAAGGCA
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25 AAAGAAGCGCGCGGCTTTGTGAACAGCAAAGCGGTTTGTCTCAACGGCAAACCTGCCGAA
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CACAAACGTTTCGGCAAAATACACTATCCTTCGGCGCGGCAACGCAACCACGCGCTTTTG
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30 CCGCCTGAGCGGGAATGACGAGTTTCAAGATTACGGTGTGTGCGGAACGCAACTGAACCG
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TTGTCTCGGTTTACCTGGTTAAAAAAGAACGATTTTCACTGATGTTGCATCAGGTTTGGG
GCGATGTTTCAACACATAGCACCGCGCCTGCTGCGCGTTTTTGTGCGTTTGGCGCGTTTCG
35 GCGGCGGGAATTTGCTACTTTTCCCGCTCGGGCGGGCGTAACGGGCGGCACACTGTC
TATAAACCGCAATACCGTTTACAATGACCGCTGTTTCAACACATACCGAATGCAACAA
TGAGAATCAGGCTGGGGCGGCACAACGCGCCCGACTTTCCACAGGGTGCCGCGGTAACCA
TAGGCAATTTGACGGCGTACACCTCGGACACAAACACATCTCCAAAACTCCGCTCG
AAGCCGACGCGCGCGGACTGCCCGTCTGACCGTCTGTTTTCGAACCCCAACCCAAAGAAT
40 TTTTCGCACTCCGCACCGGCAGGATGCCACCGTGTGCGATCAGCCCCCTGCGCACCAAGC
TCGAATTATTGGAAGGCACAGGCTGTGTGATGCCGTCTGGGTTTTGCGTTTCGATCAAA
ATTTTTCCGAAATATCCGCGCAAGGTTTTATCGACCGCCTGCTGCGTCAAACCTTGAATA
CGCGTTATTGCTCGTGGCGATGATTTCCGTTTCGGTGCGGGGCGGGAAGGCTGTTTTG
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45 ACATCCGCACCAGCAGTACCGCCGTGCGACAAGCCCTTTCAGACGGCAACCTTGCCATG
CGAAAAAATTTTGGGACACGACTACGTCTTGAGCGGCAGGTTGGTGCACGGCAGAAAAC
TCGGACGCACCTTAAACGCCCCGACTGCCAACATCCGCTGCCCGGCCACCGTTATGCAC
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50 TCGACTTTCAGGCGACCTGTACGGACAAGGGCTGAACGTCGCTTCCTGCACAACTGC
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55 CCGTAACCTGCTCGAGAGCCCGTTTTCCGATGCGCGGCAATCTTGCCAAGCGCGAGCCTG
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GCCGTCCGAAATTTATTCTGCACGACGCGCCCGCTATGCCAACGGCGACATCCACATCG

GTCATGCCGTCAATAAAATTCTCAAAGACATCATTATCCGCAGCAAAACCCAAGCCGGTT
TTGACGCGCCTTATGTGCCGGTTGGGACTGCCACGGCCTGCCCATCGAAGTGATGGTAG
AAAAACTGCACGGCAAAGATATGCCCAAAGCACGTTTCCGCGAATTGTGCCGCGAATACG
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5 GGGACCATCCTTACCTGACTATGGATTTCAAAACCGAAGCCGATACCGTGCGTATGCTCG
GCGAAATCTACAAATCCGGCTATCTCTACCGGGGTGCGAAACCGGTTCAATTCTGCTTGG
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10 GTTTCGAAGGCAAAGCGTTTGCCGTCATTTGGACGACTACGCCTTGGACGCTACCGGCCGA
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15 ACGGCATCGAGCTTTACAACCCCGTCAACGCCGAAGCCGATACATCGGCGAAACGCCGC
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CCGGCAACCTTTTGGAAGCAGTAAATCGAACACAGCTACGCCCACTGCTGGCGGCACA
AAACGCCGCTGATTTACCGCGGACAGGTCAATGGTTTGTGCGTATGGACAAAAGCCGGTG
CCGACGGCAAAACCTTGCAGCAAAAGCCATCAAGCCGTGGACGACACCGAATCTTCC
20 CGTCTTGGGGTTCGCGCGCGTTTGGAAAGCCATGATTGAAGGTGCTCCTGACTGGGTGGTT
CACGCCAACGCTATTGGGGCACGCCGATGACTTCTTTGTTTCAAAAGAAACGGGCGAGC
TGCATCCGAACCTCTGCCGAACCTTTGGAAAAAGTTGCCCTGAAAATCGAAGAAAAAGGCA
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ACGATAAACTTTCTGACACAATGGACGTATGGTTGCGACTCCGGCTCGACCCATTATTCCG
25 TTGTGAAACAACGCGAAGAATTGGAATGGCCGGCTGATTTGTATCTCGAAGGCAGCGACC
AACACCGCGGCTGGTTTCAATCGTCCATGCTGACCGGCTGCGCCTCATCAATGGGTGCGG
CGCCGTATAACAGCTGCTGACCCATGGTTTCGTTGTGCGACGGCGAAGGCAAAAAAATGT
CGAAATCCATCGGCAACGTCGTTGCACCGCAAGAGGTTTATAACGAATTCGGCGCAGACA
TCCTGCGCCTGTGGGCGGCATCTACCGATTACAGCGGCGAATTGGCGATTTCGAAAGAAA
30 TCCTCAAACGCGTAACCGAAAGCTACCGCCGTATCCGCAATACCTTGAGCTTTTTGTTTG
CCAATTGAGCGACTTTAATCCGATTGAAGATGCCGTGCAACAGGCGGATATGGTGGA
TCGACCGCTACGCCGTGGTATTGGCACGTGAGTGAAGAGTGTCTGGCAGGCGATTACT
ATCCGCGTTATGCCCTTCCACTTTGCCGTAAAAGACATTGTTTCTTTCTGCTCGGAAGACT
TGGGTGCGTCTACCTCGACATCCTGAAAGACCGCTCTACACCACCAAAGCAGACAGCC
35 ATGCACGCCGCGAGCGCAAACTGCCCTGTATCACATCACACGCAGTTTGGTTCTCTTGA
TTGCACCGATTTTGTGCTTACCGGCGAAGAAGCGTGGGACATCATCGGCGGCGGCGAAG
AAGACAGCGTCTCTTCCATACTTGGCACGAGTTCCCGACCATCAACGAAAAAACCGAAG
CCGAACCTGGTGAAAAATGGACGCGCAATCCGCGAAGCCCGGAAGCGGTAAACCGCGCCA
TCGAGCCTTTGCGCGCCGACAAAACCGTCCGTTCTGCTTGAAGCCGAAGCCGAAATTA
40 CCGCGCCGGAAGAAATGGCCGGCTATCTGAATGCTTTGGGCGAAGAAATGCGCTTTGCTT
TGCTGGTGTCTAAAGCAGAAGTGAAAGTAGGCAGCGAACTTGCCGTGCGGCTAAAGCCA
GTGATGGTGAAAAATGCGAACGCTGCTGGCACTACACCCGCGATGTGGGCGCGGTTGCAG
GCTATGAAACCGTCTGCAAACGCTGTGCAGAGAATGTGGCGGAGAAAGGCGAAACGCGCC
ATTACGCCTGATAAAGTTTGAGCAAATGCCGTCTGAAACCGCCGAACAGCATTTTCAGACG
45 GCATTTTTTGTGCCGCGATTTGTCTTTATAACGGCGGAGGGGTTTCAAGATTGCGGTGTT
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CGGAATGCGGCCGGTATCGAGCGC

The following partial DNA sequence was identified in *N. meningitidis* <SEQ ID 25>:

5 **gnm_25**

GGCGGCGTTGAGGCCGACGGCGACGGTTTTGCCGTTGTCTTTGCGGCGCAGGGTCAGTGT
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-300-

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The following partial DNA sequence was identified in *N. meningitidis* <SEQ ID 26>:

gnm_26

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-302-

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 20 TCCAATTTGCCAGCCTCGGCGAAATCCCGCAGGACAAAAAATACCGCGACGAGCCGACCA
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The following partial DNA sequence was identified in *N. meningitidis* <SEQ ID 27>:

25 gnm_27

ATTTCCGGCAGCCGTAGGGTGGGCTGTAGGGTGGGCTTCAGCCCACCAATTTACCCGCAT
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The following partial DNA sequence was identified in *N. meningitidis* <SEQ ID 28>:

gnm_28

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40 ATCATTTCCAAATCCAGACCGGAACCGCTCAGCATTTCTTCAACGAGGCTGCTGCGCCAA
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45 TGGGTGCGCAATGTGCCGGAACGGAAACCGGTTTCGTGACCGCCGCGGTGCATTTGGGCT
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50 AGGATGGTGTCTTCGCGGATGGCGGCTTTCAGTACGTCTAAATCAACCAACCGTTTTCT
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55 GCTTCCCAGCCGAAGCTGTGGCTGTTGGAGGCTGGGTTGCCGAAGGTTTCGGTCAGATAG
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5 TGTA AATTGGACGACGCGGCTGCCGTCGCCGTTGTTTTCTGTTTCGATGATGCTTTGCAG
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CAGGCAGGGCGCGCCGTGGTGGCAGTTGGCTTTGCTGCCGCATTGGGTTGCGTCCAGCCG
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GGCGCCGTTTGCGCGTTTCATCGCCAAATCCAGCATAGCGGTAACGGCGAAACGCCCTTT
GGTGGTCAGTCTCATGGTGGTGGTTGCCCATGTCGGTTTTTTTAGG

10 The following partial DNA sequence was identified in *N. meningitidis* <SEQ ID 29>:

gnm_29

15 GAAGACTTTGATTCTTTTTTTTTCAGCATATGAAGGAATATCAATATGCTATTGACAATGAA
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25 TGTCAGCGATAAGCAGTGGATCAACAACCTGACCGTCAACCTGGCCAATGCGGGCAGTGC
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20 GATGCCCGAGGCACACGCCATAATCGGCAGCCGGCCGGCGAAATGGCGCATCGCCGCCA
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25 TACCCCATCCATACCCTCTTATATCTTAGCGTGCCCGATGCGCCCTCGTGAACCTGGCG
CAGAGCCTCGCGTTCTGACAAGTACGC

The following partial DNA sequence was identified in *N. meningitidis* <SEQ ID 30>:

gnm_30

30 CAAATCAGAGCCAGATACGCTTTCATAACAAATCTCCAATCGATAAAATAATATTCGGTT
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GGACTGATTAAAGTGAGTGTCGCAAGCCATCTGAAGGCGATGTGTTTGAACCTGTTGAAA
10 GCCGCCAACAGGCTAAGTGCGCCTGTTGCCGCTAAAGGCAGCACGGATGCCTGATTAT
CGGGTATCCGGGGAGGATTAAGGGGGCGTTTGGGTAGAATTAGGAGATATTTGGGGCGGAA
AACAGCCGAAAACCTGTGTTTGGGTTTTCGGCTGTGCGGAGGGAAAGGAATTTTGCAAAGG
TCTCATCTGTATTATTTTCAAAAAACAGAAAACCAAAAAACAGCAACCTGAAATTCGTCAT
TCCCACGAAAGTGGGAATCCAGTGCGTTGAGTTTTCAGCTATTTAGAATAAATTTTGAAAC
TCTAATCGCGTCATTCCCACGAAAGTGGGAATCCAGGACGCAAAATCTCAAGAAACCGTT
15 TTACCCGATAAGTTTCCGCACCGACAACCTCTAGATTCTCGCCTGCGCGGGAATGACGAAT
CCATCCATACGGAAACCTGCATCCCGTCATTCCCACGAACCTGCATCCCGTCATTCCCAC
GAAAGTGGGAATCCAGTTTTTTGAGTTTCAGTCATTCCCGATAAATTGCCTTAGCATTGA
ATGTCTAGATTCCCGCCTGCGCGGAATGACGGGATTGAGATTGCGGCATTTATCAGGA
GCAACAGAAGCCGCTCTGCCGTCATTCCCACGAAAGTGGGAATCCAGTTTTTTTGAAGTTT
20 AGTCATTCCCGATAAATTGCCTTAGCATTGAATGTCTAGATTCCCGCCTGCGCGGGAATG
ACGAATCCATCCATACGGAAACCTGCACCACGTCATTCCCACGAACCTACATTCCGTCAT
TCCCACGAAAGTGGGAATCCAGTTTTTTGAGTTTCAGTCATTCCCGATAAATTGCCTTAG
CATTGAATGTCTAGATTCCCGCCTGCGCGGGAATGACGAATCCATCCGTACGGAAACCTG
CATCCCGTCATTCCCACGAACCTACATTCCGTCATTCCCACGAAAGTGGGAATCCAGTTT
25 TTTGAGTTTCAGTCATTCCCGATAAATTGCCTTAGCATTGAATGTCTAGATTCCCGCCTG
CGCGGGAATGACGAATCCATCCGTACGAAACCTGCACCACGTCATTCCCACGAAAGTGG
GAATCCAGTTGCTTGAGTTTCAGTCATTTCGATAAATTGCCTTAGCATTGAATGTCTAG
ATTCCCGCCTGCGCGGGAATGACGAATTCATCCGTACGGAACCTGCACCACGTCATTCC
CACGAACCTACATTCCGTCATTCCCACGAAAGTGGGAATCCAGTGCGTTGAGTTTCAGTC
30 ATTTCCAATAAATTGCCTTAGTATTGAATGTCTGGATTCCCGCCTGCGCGGGAATGACGA
ATTCATCCGTACGGAAACCTGCATCCCGTCATTCCCACGAAAGTGGGAATCCAGTTTTTT
GAGTTTCAGTCATTCCCGATAAATTGCCTTAGCATTGAATGTCTAGATTCCCGCCTGCGC
GGGAATGACGGCGGAAATCTTGTTTATATTGAATCAAAAAAACCTGCACCTTAATCAGT
TGGCGGTTTAGTCCGACTTTTGGGGTGAGATCAAGCTTTCAGACGGTATTTCCCTTTAA
35 ACTTCATTTTCGAGCGCGAGACTGAAGTTCCGTGCCCGGTGCGGCATACCTTCCATAGTTGC
TGTCGCGCGCGTGGCGGTTTGCCGTGCTTTCCGCAGTCTGGCGCAAGGATTCCCAAGTAA
CGTAGCGGTAGTTGCCGATATTGTAGATAGCCGCCCTCAAGGTCAGCCGTTTTTTTCAGAT
TCAGATAGGCGGAAACGTCGCGTCGACCAAGAAGACGACGCTCTTTTGTGCAATATC
GTTTTTGATCGCCTGCCAGATAAGCAAGCTCGTCAGGGTTTTTCCCTTTGGAATAGGTCA
40 GCATAATGTTTGCGCCCCATTTCCCTCAGGCTGGTCGTATCCGAACCCCAAAACATAAC
GCGACGGCTGTACCGCATCAAAGCATAGCTGCGGAGGGACAGTCCCGGCCGTTGGATA
CCGATTTCCGTTTGATGCGGTTGTACGCCAATGTGGTGTACAAACCTTCGGGCAGTTTGC
CATACACGCCGTTCCAGTCGATTTTTCCCAATATATTAACGCCCTGAAGCGACATATTTT
GGGCATTGTAATAATCGCGTATATCAATCTCTGTCAATTGTCTGCTGATTTCGGCAATT
45 TGGTTTTGTGATCGGCAACGGCAATCATATCGGTATAACGGTTGCGGAAGCTGCTGATTT
CCAAAAAGCCGAAATCGCCCTTCCACTGCAAACCGATTTCCCGGTTGGCTGCCTTTTCCG
ATTTTCAGGGCGGGACGCTGCCAGCCTTTCCGATAATCGTGATAAATGTCTATCCCGAAAA
GTTCTTGGAATGAGGGCGTTCTGAAGCCGCTGGAGGCACGGTAAGACACGGAAAAATGCC
GGTTCGGTTTGAACAAGATGCCGCTGTTCCACGAACGGTCAACATACCGCCCGCTGCGGA
50 CGAGTTCTTCCGACGTGGTGAAGTTTTTCCGGTCTACCTGCCGCCCAAGCTGAAATCGA
AATATTTGCCGATTGAAAAACGGTCGTTCAAAGAAATATGGATATTGCTGCCGTTGATTT
TTCCTTGGCACGCATTTGCGGGAACGAGGGTTTCGATGTAGCCGACAGCCAGCCCTTCGA
CGACTTCGGGCTTACCCAAAAGATACTTATCTTGATTGTTTTTCATCGAATCCCGTGATT
CCGAAATCCTTGCCGCATTGTGGGAAAGCTGTTTCGGGGCGGGAATCGCTTTGGAAGCAT
55 CGTAACCGAAGCCCAAAGTCAGATGGTGTTTCGTCCATTTGTTTTTCAGCGATTTCTCAA
ACGAGGCATTCAAACATTGTGCTGTTCGCGGTAGTGGAACGGTCGCTGCTGCTGCTAGG
AATACGGTTTGTCCGCCGACGCGCGCAGGATTTGTCCACAGCAGGATACACGGCGCAAT

TCAGCTTCAGCGTGTGTTATCGGTTGCCACGCCCTGTTTGTCAAACGACAACACCGCCT
TATCCGCCCAATTGTCAGAATACGCTTCGTTTTCATAACGATACAGCAAACCCATACGGC
GGCGGCGGTGATGTTTCGTCAATAAATTTGGTGCGGAATATTTCAAACCTATGCCCTGA
5 CCAAATTTTTATCGCCCTTCCACTCTTCTATATTTCGGCACAAAATACAAGCCGTGCGGGA
AATCGTCGCCGTGCTACACCCCGCTCTTGCTCTAAACTTTTCCGCCCTCGTCCGTACCGT
AATACTGTTTTTCCGTCATATCGCGGATATCGTAACGCTGTTTGGTATCCTCAAACACGC
CGCCGACATAATGCCTGCCGCCGAAGCGGTAGCCAGCTTGGCAAGCCAAGAGCCGCTGC
GGTAATCCATCGGATCGGGCAATATCCTGCCGCCGCCGTGTAAGCTTGGGCGGACAGAT
10 TTTTCGTGGCGCGCTGCGCCTCCCGCACCTGCGCCTCTTCTTCAGCACTTAAAGGCTGAT
TTTGTTC AATACGTTCTTTTACCCAGCGGTTGAGCTGGTTGTTCAAATATTTCCCGTAGC
CCGCCAATTTTGCCACGGGCTTGGATTACGCTCGCCCTCTACTGAGAAAAATGGCTCTC
TTGTCTTGCGTTTAATATCGTATGTCTGACGGAACGCGTCCAAACGGTCTATGCCGTATT
CCACCCCGTCCGCAATATCGCCGTGCGGGCGCGTTTCCCGCCCTTGGCGTTTCGGTTCGGA
15 TTAACAGCCCTTCCCAACCGTCTTTGCTGAACCCCGCGCCGAGCGACTTCATAAATTGGC
GGTTTTTACTGCCGTAGGCGGTTTTTGCTGTATCCCCCACTTTTGCCGTCTGAAATCA
GGTCTGCCGCTCTTTGGTGCGGAAGGCGACCGCGCCGCCGAGTGCGCCGCTGCCGTGAT
CGGACGAACCGGCACCTTTGTGATTTCCACCGTGCTGATGTTTTCATATTCGATTTCTGT
TGATTGCACCGCTGCCGCCGCGTCCGCCGTATCCGCTCAACGATCCCTGCACGGTAAACG
20 CCTGTAATTTGGGCAACACCGTCGACCGAAACCGCCACACGGTTTTTATCCACGCCGCGTA
TCGAGTAGCCGCGCTCGCGCCGTGTCCTGTTTCGACAACCGCCACGCCCGGATCGTAGC
GCGTCAGGTCGCGGATACCGAGTACCTGTTCTTTGTTCAACGTTTCCGACGTTTTGACGA
TTTTTGCCCAAACCGGTCCGCTCTTTTCGATCGCCGTCCCACTTTGGCGGCACGGACGGTAA
TCTCTTTTCAGGGATTGGGTCTGCGCGGCATCAGGTGTGCCCCCCCCCGCTTGGGCAGCAT
AAGCCGGAAAAAGCGGTTGCAATGGCCAAGGCAGTCAGAGTCAGCGGAAAACCGTGTTCCT
25 TATTCATTTTTCCACCTCCTGCATATCTTTCTTCGCACCGAATACCACGCCGAATTGGTG
TTTAACTTCAGATTCTAACTGTTTGCCAACATCAACTTCAGCATCAACTTCAGCTTCAAC
ATCAACTTTATTTTCAGTACCTTCAGTTATACCAAGAGATTTCCCATCATTATTGAAAAAT
AATACCGCCCAATTCTCCGCTGCGGGCCGTAAAAATCCCCCTTCTACACGAAGATTACT
AGCTTGAAAGTTTTTGGGGTCGGTCGAACCATTTCCCGAAAGATTGATGCCGTTCTCCCG
30 AGTCGTGCTGTGCGGTAGAAACCGTTGCCCTCAATCTTGCCGTTTTCAATATGGAAAGC
AGGTCTACACCGTTTTTCCCTCCGTCAGCGTTCGGGAAATCGATTTCTTGCCGAAATCAAC
GGTAAATACTGCTTTTTGCGCTTCTTTATCCGCCTGATTGTCCCATTGAATGGGTTTGCC
GATACGCGCTTCCCAAGTGCCGCTATAGTGTGCTTCTCCAGTTTTTCGGAATATCCGTTTC
CGCCGTGCGGATACCTTTTCAGGAAAAGGTCGATGTTCTGCTTTAGGGGCTTCCGGAGC
35 GGGCAGGATGCCGTCTGAACCGCTGCCGCCTTCTTCTGTCGGCGATTCTTCTTCGGGTTT
TTCAGCTTCATCTTCACCTTCTACGGCTTCGTCTTCTTCGCTGCCTTCGTCTTTTACGGC
TGCGTCTTCGGTGCTTCTTCATCGTCGATTTTCGTCTTCGCCTTCTTCGACGCTATCAAC
GCCTGTATCCTCTTCGTCCCTCTCTTCGTCTTCGCCTTCGGTTTGGCGGCGGACGTTT
40 TTTCCCTACCATCGGCAAGCTCGATGTTTTGTTCTTTGTTTACCAAAGGAATTTACGCCC
TTTCGACAAGAAGTTTTGTCGGGATGACCAAAATCGGGCATAGAGGAAATGGCAAACACG
GGGATTTTTATCACTTGCTCGTCAACGGAAATTTTCAGAGAATCCAAGATTTTGGTGTG
TTTTCCAGACGACAGGGCAGGTTTTGTATCTGCTGCGTTTTCTGCTCTGTTTTTTGTTT
GCCTGCGAATACGCCGAATACGCTGTTGTGCTTGCTGATAAACCGTCCGCAAGCTCTTC
45 TCCGTTATCGCCGAAAAAACGCCCTCAAGCCGCTGATCGGCATCGGTATGGAAAAACAA
ATATTCTTTATCAGCGTGTGCGTCTTCACCTCGGTGCTAACTTTGGCACTGCCGGTAAA
GCGGTTGCCGTCCAATGTTGCGGTAATGTCGTAAATGGTCAGCGGTTTTTTGGGCTCATT
TGGATTACTTTTTATTTGACATACTGATTTTTAATCAGCTTGCCATTACAGGGTTTTGTT
ATCAAAATCAACCGTATATTTCGGCAGGATGCTTTTCCCTGTCGTGCGCATCCCTAGCCTC
50 ATAAGAAGTTGC

The following partial DNA sequence was identified in *N. meningitidis* <SEQ ID 31>:

gnm_31

TTTTTGGATAGCGTGCCAAATGCTGCTGAATTTGCTCAACCGAGATGGCAAGCCTTGCGG
ACACCTCAAAGCCTTGTTTTGCCAAGCGGATCGGTGTATCAAATAATTTTCCCCAAGGCA
ATACACCGTATCGCTGATGTATTGTCTCCATCAGTTTAGGGATAGCAGGCGTACCCACCG
5 AGCGACCACCGGCCACCGGTTCCATAAATTTCAATGGTTGACCATCTTTATCCAAAAATA
ATTCCGGCGTGCACGCATCGGTGCCGTCTCACGCCCATCAAATGTGGTCAATGTTTTGG
CGGTATTATCCCAATACAACACAAATGCACCACCGCCCAAGCCTGACGACTGTGGCTCTA
CCAAGCTTAGTGTCTGCTGCACCGCCACCATCGCATCTGCAGCGCTACCGCCTTGCTTTA
10 AGATATCATAGCCAGCTTGTGTTGCTAATGGATTGGCTGACGCTACCATAAAATCACTTG
CAAGACCAGGTAAGGTTCTTCGCGTTGCATCGAATTAATCCACATCATCCACCGCTTGTG
CGGGTCCCCGTCAATTCCTTTGAGTTTTAATCTTGCGACCGTACTCCCCAGGCGGTCAAT
TTCACGCGTTAGCTACGCTACCAAGCAATCAGGTTGCCCAACAGCTAATTGACATCGTTT
AGGGCGTGGACTACCAGGATCTAATCCTGTTTGCTACCCACGCTTTCGGGCATGAACG
15 TCAGTGTTGTCCCAGGAGCTGCCTTCGCCATCGGTATTCTCCACATCTCTACGCATTT
CACTGCTACACGTGGAATCTACCTCCCTCTGACACACTCGAGTCACCCAGTTCAGAACG
CAGTTCCCGGTTGAGCCCGGGGATTTACATCCTGCTTAAGTAACCGTCTGCGCCCGCT
TTACGCCCAGTAATTCGATTAACGCTCGCACCTACGTATTACCGCGGTGCTGGCAGC
TAGTTAGCCGGTGCTTATTCTTCAGGTACCGTCATCAGCCGCTGATATTAGCAACAGCCT
20 TTTCTTCCCTGACAAAAGTCTTTTACAACCCGAAGGCCTTCTTCAGACACGCGGCATGGC
TGGATCAGGCTTGCGCCCATGTCCAAAATTCCTTACTGCTGCCTCCCGTAGGAGTCTGG
GCCGTGTCTCAGTCCCAGTGTGGCGGATCATCTCTCAGACCCGCTACTGATCGTGCCT
TGGTAGGCCCTTTACCCCACTAGCTAATCAGATATCGGCCGCTCGAATAGCGCAAGG
CCCGAAGGTCCCTGCTTTCTCTCTCAAGACGTATGCGGTATTAGCTGATCTTTCGATCA
25 GTTATCCCCACTACTCGGTACGTTCCGATATGTTACTCACCCGTTTCGCCACTCGCCACC
CGAGAAGCAAGCTTCTCTGTGCTGCCGTCCGACTTGCTATGTGTAAGCATGCCGCCAGCG
TTCAATCTGAGCCAGGATCAAACCTCTTATGTTCAATCTCTAACTTTTAACTTCTGGTCT
GCTTCAAAGAAACCAACAGGACAATGTTCAAACATTATCTTGTCTGTCTTTCAAACAGT
GTGAGACTCAAGGCACTCACACTTATCGGTAATCTGTTATGTTAAAGAGCGTTGCGAATT
ATAAAGTATTCCTTCCGCCTGTCAAGATATCTCTCGATAICCCCAACATTCTGTGCTATA
30 CTTTTTCAGTTCGTCCGCCACTTCTGCAGCAGCGAAGAACCGAACTATACGCCACAGGGA
AAAACGGTCAATGCTTTTCAGCGGGATTTTTTTGGGGAAATTCGTATGTCGCTGTGCGAT
AAGGTTTTTTTATTTCTGCTAAATACTGCGCCGCCTCCAACAATCCTTTCTCTCCCTCCT
CCGGCTGGTGCGCCTTTGTGAATATGCTGTCTGAAACTCGGGGACTCAGACGGCATCTGT
TGGCTCTTCTTATCTTTTCAGAATGATTTCCAATACGAACCTTGCTGCCCATATAGGCAAT
35 CATAAGCTGACAAATCCGATGATGGTCCACACGGCGGCTTTTTTGCCGCGCCATGCGGT
CATGCTGTGCTTGAGCAGCAGTCCGCCGTAAATCAGCCATGACAATATGCCGAATACGGT
TTTATGGGTAAAGGTGATGGGTTTGCCGAATACGGCTTCGGCAAAAAATGTTCCACTGAC
GACGGAATAGGTGAGCAGGATGAAACCTGCCACATGGCCTGGAACATGAGTTTTTCCAA
ACTGAGCAGCGACGGCAGGAATCCTGCGAGCTTGAGAAGCTCCTGCGGTGCAGGCTCCG
40 ATTCAGCAGCAGGGTCAAACCGGACAATAATGTTGCGATGCCGAACAGCCGTATGCGAG
CAGCGAAGTTCGATATGCAGCATAAAGGGAAGGTGCGTAATTTTCATATCCCAGAAATTT
TCCAGGAAAAACCAACCTGACAGCAGCATCAGTGCGGCGCAAGGATACAGCAGCAACTG
CACTCCGCGCAGCGGATAAAAGAAGCTGCCGGCAAAATAAATAAACAGCATCATCCAAAC
AATCAGGCTGCCGGAATACCCGAAGCCCATAATGATGATTTTGTCTTGAATGACCGGCAT
45 AAGCAGTGCCGCGCGTGGACGGTCAATGCCGCACCCAAAACCGGCAATTCCGTCTTCCA
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GTAAACCGCCGTCAAAAAGATGAAAACCTGTCGGCATGGTGGACTTTCTCTATCTATACTG
TTGCGCGGTATGCGGCCGCTTATGAAATATTGGAACTTTTAACGTTGGAATTGTAAATC
CCCATTTCCGTCAAGCCTTGACGGATTTGCCGATATGCTGTCCGGCACACAAGCCGCATC
50 AAATTTATTTTGATTTTATTTTAAACAAAGAATGCCCTGATGGGGCAAGCTATTCTTATTC
AGACCAAGGACAGTATGTTAGACAATTTAACGGCCGCTTCAGCAATGTCTTCAAAAAC
ATCCGGGGCAGGCCAAACTGACCGAAGACAATATTAAAGAGGCCTTGCGCGAAGTCCGC
CTCGCCCTGCTTGAGGCGGATGTCGCCCTGCCTGTGCTCAAAGAGTTTCATCAACAACGTC
AAAGAAAAGGCCCTCGGTGAGGAAGTAGCGGGCAGCCTGACGCCGGATCAGGCATTTATC
55 GCGGTGGTCAACAAAGCCCTGACCGAAGTATGGGCAGGGAAAAACAAACGCTGGATTTG
TCGGTTGCGCCGCCCGCCGTGTTGATGGCAGGTTTGCAGGGCGCAGGCAAGACGACG

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ACCGTCGGCAAACCTCGCCCGCTGTTGAAAAACGATCAGAAGAAAAAGGTTTTGGTGGTA
TCCGCCGACGTTTACCCTCCTGCCGCGATTGAACAGCTGCGTCTGTTGGCCGAACAGGTC
GGCGTGGATTTTTTCCCGTCCGATACCAACCAAAAACCGGTTGAAATTGCAACTGCCGCC
5 GTCGATTACGCCAAAAACATTTTTACGATGTATTGATGGTCGATACCGCCGGCGCTTTG
GCAATCGATGAAGAGATGATGAACGAAATCAAAGCCCTTCACGCGGCGGTTAACCCGGTG
GAACTTTTGTTCGTCATCGATGCGATGCTGGGTGAGGATGCGGTGAACACTGCTCAGGCA
TTTAATGAAGCCCTGCCGCTGACCGGAGTCGTATTGACCAAGATGGACGGCGACTCGCGC
GGCGGTGCCGCATTGTCCGTACGCCACGTAACCGGCAAACCGATTAAATTTATCGGTGTC
10 GGCGAAAAATCAACGGCCTCGAACCTTCCACCCCGACCGTCTTGCCGGCCGCATTTTG
GGTATGGGCGACGTATTGACCCGTGATTGAAGACGTTCAAAAAGGTATAGACGAAGAAGCC
GCCGCTAAAAATGGCGAAAAAGCTGCACAAAGGCAAAGGCTTCGACCTCAACGACTTTAAA
GAACAAATCCAGCAAATGCGCAATATGGGCGGTTTGGAAAACTGATGTCGAAAATGCCG
GGCGAACTGGGTCAAATCTCGAAACAAATCCCCGAAGGAACGGCTGAAAAAGCGATGGGC
AAAGTAGAAGCCATCATCAACTCGATGACCCCTAAAGAACGCGCCAACCCCTGCCCTGCTC
15 AAAGCCAGCCGCAAACGCCGTATTGCAATGGGTGCGGGCACAACCGTGCGAGGAAGTGAAC
AAATGCTCAAACAGTTTGAACAAATGCAACAAATGATGAAGATGTTGACGGCAACGGC
TTGGGCAAACTGATGCGTATGGCGAAAGGAATGAGGGGGATAAAAGGGATGTTCCCGGGT
TTGTAAGCCGATTTAACAGAAAACGCCGTCTGAAATTTGACGCGCGTTTTTGTTTTATA
TTCTGATTTATAGTGGATTAACAAAAATCAGGACAAGCGCGGAGCCGACAGACGTACAG
20 ATAGTACGGAACCGATTCACTTGGTGCTTCAGCACCTTAGAGAATCGTTCTCTTTGAGCT
AAGGCGAGCCAACGCCGTACTGGTTTTTGTAAATCCGCTATATATTCTGATTTAAACCA
TAAGGCTTTAAGCAATCATCTCTCTATAAAGCCTAAATACAAAAGGCCGTCTGAAATCC
TATTTTCGATGGCCTTTACTCATTCATCCTCAACTTATTGCGGCTTTTTCTGCTCTTC
GCGTACTTTATCCACCAACTGGTCAATCGTGGTCATACCGGACTGCCAGTCTTTAAATTC
25 AACTTGGTATTTGCCGCCGACAATCACAGTCGGTGTCGCGCTGATTTGGAATTTATTGGT
CAACTCTTCCATTTAGCCGACGCGCTTGGCTTTCAGGAGCCTCAAATGCAGCCAATAC
TTTTTTGCCGTCAAACGCTGTTTGCTCGGACAGCCATTTTTTTCAGGGTATCGGTATCGGC
CAGATTGATTTTTTGATTAACCATCGCATCGAAAATATGGCTGTTGGCTTTATCTGATT
ACCGGCCATTTCCACTGCGGCCGCCAAACGTGCCAAAGGTTTCATTTTCATCACCACACAC
30 GACATGCTCCCGGCGCATATAGGTATCGTCTTTAAACGTTTTGATGTGCTCGCTCAAGAC
CGGCTCAAGATGGGCGCAATGCGGGCAGAAGTAGCCGAAAAATCCAATACTTCGATTTT
ACCGGCCTGCTGTTGCGGAATAGGCGTAGACAATACAGTGTAGTTACACCTTCGTTCAA
CTCAGCAGGGGCTGCCGGAGCAGATGAGCTGCTTTGGGCGCTGTCTGCCGGAACACTGGT
TTCAGCCTGTTTGCTACAAGCGGCCAATGCCAACAGGGTCAATGAAGTCAAAGCTAAGGT
35 TTTGAGTTTCATAGGTATCTTGTGTGTCAGATTAATGTGCGGATTTTATGGCATTTTA
TTGAAGGCGTGTTGATTTGAGTGAAAAATGTGTTTAGTTTTATTTTCAGCCTTTGCGCT
ATTTTCATCAGAAACGGTAATTTACCCGGGCAGTATAGCCGCGCGGATTACCCGGCATAGA
GTCCGAACGCCAATATTTTGTATTGAGCAGATTGGCTGCGGCAAAGGTAACGTTAACATT
TTTATGGTTCCAGCCAAGCATGGCATCAACTCGGGCAAAGCCTGGAAGCGTAGTCACTTC
40 TTTATTTCTTGAGTTGTAACCGTAGCGTTTGCTGTACCGGTTACGCCGATTTGCGCGTA
GAGGTTTTCGGTGCGGGTATAACGGAACAGGTTGCCGGTAACGTTGCTGGTATTATT
CAAATGGATGCCCACTCGGTGCGGATTTTCTTGTCTTCAACGACTTTGCGCTGCATCAC
GCCCCAAGCAACCGCGCAGATAGAGTTTTTTGGGGATGATTTGCCCGATGGCGGACAATTC
CAGCGCGCGCAACCGTGTTTGCCGCTAACCGCATAAATATAAGGGTTGTTTTTGGATC
45 GGGGCGGTAGCGGATATTGAAGCGTTCGATTTGGTAGGCAGACAACGTAGTGCTGAGGCG
GTCGTCCAGCCAACCTGCTTTTACGCCGGTTTCGTATTGGCGGGTGACTCGGGGTGCGC
GTTGAACACGGCGGAAGACAACGTATCGATGCTCAAATAGCCGCCGCTCCGCCATAAGG
CGCGAAGCCTTTGTTATACGAGGCGTAAAGTGTGTGGACGGGATTGATGTTCCACACTGC
GCCGATGTTGGGGCTGAACGAGTGTCCGCTGTATTGGCGGCTGCTGCCGGTGAGTTTGTT
50 TTCGGAATTAAGGTGATTTGTGCTAACGGCCGCCGAGGACGAATTTCAAATCGGGCGT
GGCGGAGAAGATGTTTTGCACAAAGATGCCGTAGGAGTCGGCTTTGTGGCGGTTTTGGGT
CAGAATAGGCTGCAATCTGCCGAAGCCGCCAGCTTGCSCGGTCTAGGGGTTGATGGA
GGCGGAAAAGGCGCTGCTGAAACCAATGTGCGGTTGCGGTGTTGCGGGCTGTAATCCAT
GCCTACGGTCAGGTGGTTTTTCAAACGGCCGATGGTGTAGTCGCCGTTGAGCGTTAAGTT
55 GGACGACAGGGTTTTGTTGTCGGTCTGCTGCCAGGCGTAGTTACGTTTGATTAAGTTGCC
ATTTTCGCTGCTGCATAGAAATGATCAAAATCCTGCGCCGCCGTGCGGTGGGCGAGCTG
CCATTGGGCGACGCCATTTGTCGTTGAAGCGTATTCAAGGTCGGAACGCCAACTTGACAG

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CTTGTCTTTGACAAATCGTTCCGGTGGGCGAACCCCATGCGGTAAGGCAGTCCGAAGCG
GTCGTACACGGACTTGGTCGGACTGCGGTGCGGCGTCCACATTGTCGTAGGTGTA
TTGCCCCGTCCACTTCAAGCCGTTGTGAGTTTGACGGTAATGCTGGGCGAAACCATGAC
ATTTTGTCTGTCTATGCCGCTGCGGAACGAATTGGCGCGCCGACTTCGCCGGTGAGACG
5 GATGGCGACGTTTTTGTTCAGCACTTCGTTAATGTCCATATTAGGCTGCGGTTTGCCCA
TGAGCCGTAAACCGCTCCGATGTGCGGCTTTGTTTGAAGTTGGCGTATTTGCTGACCAT
GTTGATGACGCCGCCGCCGTTGGTGCGGCCGTAAAGCACGGAAGACGGGCCTTTCAGGAT
TTCCACGCGCTCGATGTTGGCAGTACTGCGGCGCACTTGTCCGCTTTTCGCGCACGCCGTC
GCGGTAAATATCGGATGCGTCGGCTTGAAAACCGCGCAGGAAAATGCTTTCACCGCGCAT
10 ATCGTAGGCAGCGTCGATGCGCGCATTGCGTTCGAGGATGGAACCTCAAATCGTTCCTACC
GTAATTTTTGTTTTCTGGATATTGAGCGTATCGATGGTTTGCGGCGTTTCTTTGATGAG
CTGTCCGTTGCGGGTAACGGCGGCTTCGTCTAGTTGATGTAGCCTTTGAGTACGCTGGT
GTCGGACTGTCCGACCACGGAACGGTGGGCAGAGTGGCGGTGTAATGTTCAACATTGTCTC
CTGCGTATCGGCGGCAGCAACAGGGAAGGAAGCAATAATCAGCGTGGGTAATAAAGCTAA
15 ATGAAATGATATTTTCATTTTATACTCAATTTAACAAAACAACCGAATTATATTGCCTC
ACGGAGGAAATGAGAATAATTTCTTTTAACTATATTGAACATGATATTTGTAAACAAAGG
TCTCAGAATGCGGAAAACCTCGCCGCTGATACTGAAAAATGCCGTCTGAACAGGGTTCAG
ACGGCATTTTTTTGACCGCGAAATTATGCGCCGAACACTTTCAAACGTTCTGCAACGGGT
TCAAAGGTCTTTTACCTGCGCGCCCTTCAATACCGCCGATAACCAATTTGTGCGCGCAAC
20 AACCAGTTTTTCGGGGATATTCCACGCTTTGGCAATCGCCGCATCGGGCAAGGATTGTAA
TGTTGCAGTTTGCACCTACGCCGACCGCGGCAAGTGTCTGTCCAAACGGCATACTGCACC
ATCGCGTTTGCCTGATCCGCCCCAACGGGGAAGTAGCGGCATAAGCAGGGAAGTGTCTC
TGCAAACCTTTGACGACATTTTGATCTTCATAAAACAAATGGTTGCCGACCCGCTTA
AACAGGTTCAATTTTTGCGCGGTTCGGTTCAAACTGTGCGCAGGCACGACGGCACGCAGC
25 GcGTCTTCGACAAATTGCCACACCTTATCATGCTCTTCGCCAAACAGCACGACCACGCGG
GCAGATTGGGAATTGAACGAAGAAGGTGTGTGCAAAACGGCGTGTTCGACGATTGGACA
ACTTCATCTTTGCCGACGGGCAGATTTTTATTAAACGAATAAaTGGAACGGCGGCTTTTCG
GCAGCCTGTTGCAGAGATTGACGGGTC

30 The following partial DNA sequence was identified in *N. meningitidis* <SEQ ID 32>:

gnm_32

CAGCGCGCCGCCCTCGGCATTCCCGCCCTCCCTTTGAACGCGCAGCAAACCGCCGATTTG
GTTGAGCTGCTGAAAAGCCCGCCCGCAGGCGAAGGCGAGTTCTTGGTCGAACTGCTTGCC
CACCCTGTTCCGCCCCGTGTGGACGATGCCGCCAAAGTCAAAGCCTCATTCCTGGCTGCC
35 GTTGCCGAAGGCAGCGCGTCCAGCCCGTGATCTCCCCGAATATGCGACCGAACTCTTA
GGTACAATGCTCGCGGTTACAATATTCACGCCTTAATCGAACTCTTGGACGACGACAAA
CTCGCGTCCATTGCTGCCAAAGGCTTGAAACATACGCTTCTGATGTTTCGATTCCCTCCAC
GACGTTCAAGAAAAAGCCGAAAAAGGCAACAAATACGCGCAAGAAAGTTTGAATCTTGG
GCAGATGCCGAATGGTTGCGCTCACGCGCCAAAGTTCGCCAAAAAATCACCGTTACCGTT
40 TTCAAAGTTGACGGCGAAACCAATACAGACGACCTCTCCCCGCGCCCGACGCGTGGAGT
CGTCCCAGATATTCCGCTGCACGCGCTGGCCATGCTGAAAACCCGCGCGACGGCATCACG
CCCGACAAACCGGGCGAAGTCGGTCCGATTAAATTGTTGGAAGAACTCAAAGCCAAAGGC
CATCCGTTGCTTACGTCGGCGACGTGGTCCGTTCTTTCACGCAAATCCGCGACC
AATCCGTCATTTGGCATAACGGCGAAGACATTCCGTTTCGTGCCGAACAAACGCTTCGGC
45 GGCGTATGTTTGGGCGGCAAAATCGCGCCGATTTTCTTCAATACCAAGAAGATTCCGGC
GCGCTGCCGATTGAAGTCGATGTATCTGCTCTAAAAATGGGCGATGTCGTGATATCCTG
CCTTATGAAGGCAAAATCGTGAAAACGGCGAGACTGTTGCCGAGTTTGAATTGAAATCA
CAAGTATTGCTGGACGAAGTGCAAGCCGGCGGCGGTATCAACCTGATTATCGGCCGAGGT
CTGACCGCCAAAGCGCGCAAGCCCTGAAACTGCCTGCCTCTACTGCATTCCGCGTCCCG
50 CAAGCGCCTGCCGAAAGCAAAGCCGTTTACCTTGGCGCAAAAAATGGTGGGCCGCGCC
TGCGGTCTGCCCGAAGGACAAGGCGTGCGCCCGGGTACTTACTGCGAACCAGCGTATGACG
ACGGTCGGCTCGCAAGACACGACCGGCCCGATGACCCGCGACGAGTTGAAAGACTTGGCT
GTTTTGGGCTTCTCCGCCGATATGGTGATGCAGTCTTCTGCCACACCGCCGCTATCCG

AAACCTGTCGATGTAAAAACCCATAAAGAACTGCCCGCCTTTATTTCCACCCGTTGGCGGC
GTGTCACTGCGTCCGGGCGACGGCGTCATCCACTCGTGGCTCAACCGCTGCTGCTGCCC
GATACCGTCGGCACCGGCGGCGACAGCCATACCCGTTTCCCATCGGTATTTCCCTTCCCC
5 GCGGGCTCCGGCTTGGTTGCCTTTGCCGCGCAACGGGCGTAATGCCGCTCGATATGCCC
GAGTCTGTATTGGTACGCTTCAGCGGCAAGCTGCAACCGGGCGTAACCCTGCGCGATTTG
GTGAACGCCATCCCGCTGTACGCAATCAAACAAGGTTTGCTGACCGTTGCCAAAGCCGGT
AAGAAAAACATCTTCTCCGGCCGCATCCTCGAAATCGAAGGCCTGCCTGATTTGAAAGTG
GAACAAGCCTTTGAATTGACCGACGCATCCGCCGAACGCTCCGCCGCCGGCTGTACCGTG
10 AAGCTCAACAAAGAGCCGATTATCGAGTACATGAAATCCAACGTCGTGTTGATGAAAAAC
ATGATTGCCAACGCTATCAAGACCCGCGCACTTTGGAACGCCGCATCAAAGCTATGGAA
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 35 TGCGGCTACCGTACCCCGTCGCACTCTACAAACTCAAACAACGCCTTGAAAAGCAGGCA
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The following partial DNA sequence was identified in *N. meningitidis* <SEQ ID 33>:

gnm_33

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30 TCCAATTTTTTGGTTTCGTGGCTGTACGCCTGTATATTTAAGGTGTTTGAGTACATCTG
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 15 CGAAACCGTCGGGCTTCAGGGTTTTCCGCTTATCGCGTATCAACCGCCTTGGCGGTTTTG
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 AACCGCTTGTGCGG

20 The following partial DNA sequence was identified in *N. meningitidis* <SEQ ID 34>:

gnm_34

CAAATGGTCGTCATTCATATAATCGTCTTCCGGCCCGCTCCAATTCAAAATATCTTGTTT
 TGTCAGCTTTGCCATAATGTATATCCTCTCGGTTACCGCAAAAAACAAAGCACCACAAA
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AATACGACCATTTGTTCAAACCCGGCATTTATGTGGACGTTGTACGCGGCGAACCTTTGT
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50 GCAGCCACGCCCGGACTCGCATTTGGGACACGTCTTCCCGACGGCCCGCGCGACAAAG
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55 ACCGTTCCAACGCGAAGGCGACCGCTGCGCGCGGACGGATTTCGCGGTTGCCGTCAAAC
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GTTTGCTTTCGCTGCCGCCGCCCGGACCGCGGATGCCGGAAATACCGACGGCGTAATCCG

CCTGCGCCACGGCTTTCGCGCCGCGGCCATCTCATAGACGGTTTGGCGGCTGACCGCGC
CGTGTTTCGAGCAGGGTTTCGGGCAACACGCCCAAGCGGTCTTCTTTGGCTTTGTTGCTGT
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5 TTCGGGCGATGGTGTGCAGCGCGTCCATTTCCTACTCTCTTTCAGACGGCGTTTAAGAA
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10 GCCATTTCCTCAATTCGCAGTTGTAATCGACGCGGACTATCACTTGGGCGCGGCACAGCGGC
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15 CCGATTAAGGCGGTTACGGATGTTGTGAAAACGCCAATCTGCCAATGCGGCAATAATC
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35 AAAATCAGTTTGTGAGCATTTCGTTTCGCGCGCGCCGCTGAATAATCGACACCTTCGCA
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5 AACCTCGAAACCTGCTCGAAGCCGACGGAACGAAGTCGGGCTGTTGACCGACGTTCC
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40 CCAACAGGTTGCGCGCCGCCATCGCGCGGTTTCGGATTTGGGCTGCCACCCGTCGATA
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55 TCAGACGGTATCTGCCGCCAAATACCGTCTGAACGCTTGCGGCTTATTTCAAGCCGAGTA
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GGTCCGCTTCGCCAGCTTGTCTAGGTTTCAAACCGTCTTAGTCCGGTATTTGCCCA

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GAATTTGCGTTGACCTGTTTGAAGTTGGTATCGGTTTTTCCAACAAGGCTTTGTTTTTGG
CCTCGATCAGCGGACGGAACAAATCGACGATTTTTTTAGATCCGTCCACATTGGCTTGGAA
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5 CGATTTCTTTTTGTCAGGGCTTCGACATCGGTATCAGTTTCGCTGCAATTTCTTCACGC
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15 CGCTCGGCACGGTCAGTTCCATCGGTTTCGAGGCATTGTCGTTGACGGCGATACTGACCG
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30 GACCCCGAACCAGACCTTAGGCATCAGTTTGAATGTCCGGACTGTTTCAGAAAACGGGC
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35 CCATCTTTCTTATTACTGCCGGCAACATTGTCCATTATGAAAAAATACCTATTCCGCGCC
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40 GAAAATGGGCGGCGAAACGCATTGTGCTGTGATGAGGGCGGCGATGACGCGCGCGCAGG
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45 TTGAACGATATGTCCGAGAGATTAAATGGTGACAGCTTCTTTGCGGACGACCGAGAACG
AAGAAGTCGTGCTGCCAACAGCGTGGTGTATGGCGACGGGCGATGACGGGGATACCGGA
TAGGTGAGTGGGTTTTTACCTTTTTGCGGATGGCCTGGGTTTTTTCTTTGTAAATTGCC
AATTTGTCCAGCAGGCTTTCCAATACGCCGCCCGTTTCGCCCGCCGCAAC

50 The following partial DNA sequence was identified in *N. meningitidis* <SEQ ID 35>:

gnm_35

CCGATTTGGTGCGAAAAATTGCATTCGCCGAAAAATTTGGTTTCAGACGGCATTCAA
ATGTTTTGGCTGCCAGCCAGCGTTCCGCGTCCAAAGCCGCTGACAGCCGAAGCCGCG

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CTGGTAATCGCCTGACGGTAGGTATGGTCTTTTACGTGCGCCGCCGCCATACGCCTTCG
ATATTGGTTGCGCCGACATTGTCCGCGTGC CGCCTTTGGTTTTTCAGGTAACCGGCTTCG
TCCATTTCCAACCTGACCTTTGAAAATATCGGTATTCGGCTTGTGCCGATGGCGATAAAA
ATGCCGCTGACGGCAATTTGTTGCTCAGAACCGTCGTTGTTTTTAATAATGCGCCGTTT
5 ACGCCCCGATCGTCGCCAGTACTTCTTGCAAGTTGCTTCCAGCTTGAGGATGATTTTG
CCCTCTTCCACGCGTTTCATCAGTTTGTGATCATGATTTTTTTCGGCACGGAACCTCGCTG
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GCCGTATTGCCGCCGCCAACTACGGCAACATCTTGGTTTTTATAGAAGAAACCGTCGCAG
10 GTGGCACAAGCGGAAACGCCTTTTCTGCAAACGCTTCTCTACTCGGCAAACCGAGGTAT
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15 CCGGCGGGGCGGAACCCAAAATAATCAGTTTTCGGGTGTTGGGACATTGTTTTTCCCTTTG
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20 CCAGCGAAGAGGCGCAGGTAGTGTGTTGACGACAGCAAAACCTCAGTAGCCGACATTGCCA
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GGCAGTTTCGATTGGCAAGCGTGGTGCAGCTTTGGCTGGCAATCCCGTTTTACAAAAGCG
25 CGTGGGCGAGCATTAAAGGGCGGACTGGCGAATATGGACGTGCTGGTTACCATCGGCACGG
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55 GATATGGTAATATGCCGTCTGAAACCGTTTTTCAAGTAATTGATATGAATAAAGAAACCC
GTTTTCCGGAACACTTCGACATCCCACTTTTCTCAAAAACCTGCCCAACCTGCCAGGCG
TATACCGTTTTTTCAACGAAAGCGGCAACGTCTTATACGTCCGCAAGCCGTCAACCTCA

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AGCGGCGCGTGTCCGGCTATTTCCAGAAAAACGACCAT'TCCCCGCGCATCGCATTGATGG
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5 GCACGCTGAAAAAGCCTAATCAATATTTCCGCCCCATATCCCAACAGCAACGCCGTGCGCG
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 50

The following partial DNA sequence was identified in *N. meningitidis* <SEQ ID 36>:

gnm_36

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The following partial DNA sequence was identified in *N. meningitidis* <SEQ ID 37>:

gnm_37

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